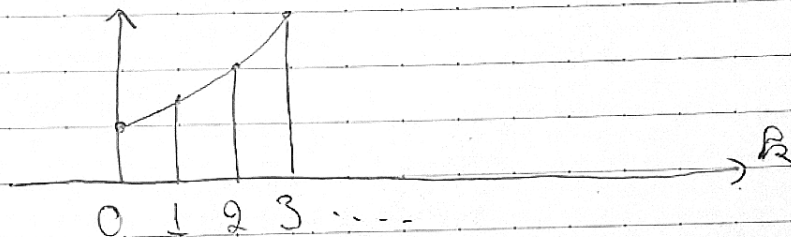


$$c) h(n) = a^n \cdot u(n)$$

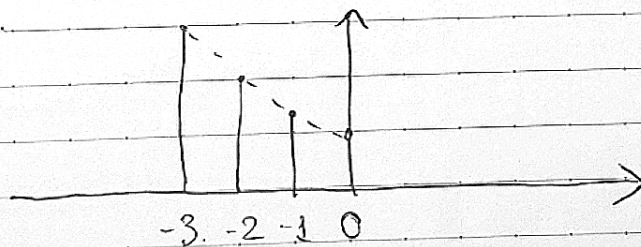
$$TH_1: n \geq 1$$

$$\begin{cases} a^k & k \geq 0 \\ 0 & k < 0 \end{cases}$$

$$h(k)$$



$$h(k)$$



$$n < 0: y(n) = 0$$

$$n = 0: y(n) = 1$$

$$n > 0: y(n) = \frac{1 - a^{n+1}}{1 - a} \cdot u(n)$$

$$TH_2: n < 1$$

$$y(n) = \frac{-1 \cdot -a^{n+1}}{1 - a} \cdot u(n)$$